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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/674,167	12/28/2000	Nobuyoshi Nambu	0052/036001	2870

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SMITH PATENT OFFICE
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EXAMINER

CINTINS, IVARS C

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 09/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/674,167

Applicant(s)
Nambu et al.

Examiner
Ivars Cintins

Art Unit
1724



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jan 31, 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3, 4, 6-10, 12-18, 20, and 22-26 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 4, 6-10, 12-18, 20, and 22-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 11
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3, 4, 6-10, 12-18, 20 and 22-26 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The claims contain numerous vague and indefinite expressions. For example, the term "at least as a portion of a filter material" (claim 1, lines 1-2) is vague, and indefinite as to the limitation intended. The term "being introduced into ..." (claim 1, lines 3-5) appears to be a method step, and is hence indefinite as to the product limitation intended. Applicant is advised that an amendment reciting that the recited fiber contains a functional group of the type recited would overcome this portion of the rejection. The term "having an amino group and at least two hydroxyl groups combined with carbons" (claim 1, lines 8-9) is vague, and indefinite as to the limitation intended, particularly since constituent "G" in formula (1) does not have to be a polyhydric alcohol, and constituent "R" in this formula could be a hydrogen atom. The term "residue of a chain

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sugar alcohol" (claim 1, line 13) is vague, and indefinite as to the material intended. The term "in which an amino group is eliminated from ..." (claim 3, lines 2-3) is vague, and indefinite as to the limitation intended. Claims 6-8 appear to merely recite process steps, and are therefore indefinite as to the product limitations intended. Similarly, claim 10 is vague, and indefinite as to the limitation intended. The term "allowing a liquid to pass through a device" (claim 15, lines 2-3) is vague, and indefinite as to the process steps intended. The term "processing ... into a filter" (claim 17, lines 2-3) is vague, and indefinite as to the manipulative steps intended. The recitation that the fiber has a functional group "in a molecule" (claim 17, lines 3-4; claim 23, line 2; claim 24, line 2; claim 25, lines 7-8) is vague, and indefinite as to the limitation intended. The term "wherein G and R have the same meaning as defined above" (claim 17, line 15) is vague, and indefinite as to the limitation intended, since neither "G" nor "R" has been previously defined in this claim. The term "allowed to react" (claim 18, lines 2-3; claim 23, lines 4 and 6) is vague, and indefinite as to the process steps intended. The term "at least one selected from the group ..." (claim 25, line 2) is vague, and indefinite as to the limitation intended. Claim 26 is vague, and indefinite as to the limitations intended. Furthermore, the

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repeated use of parenthesis and brackets throughout the claims (e.g. claim 1, lines 13-17 and 19-20; claim 7, last line; claim 10, lines 6-7; claim 17, lines 11-12, 15 and 17-18; and claim 26, lines 7-8) is somewhat indefinite, since brackets normally designate subject matter intended to be deleted from a claim (see claim 1, line 4).

Claims 1, 3, 4, 6-10, 12-18, 20 and 22-26 would be allowed if rewritten or amended to overcome the above rejection under 35 U.S.C. § 112.

Nambu et al. (U.S. Patent Nos. 6,168,863 & 6,200,481) disclose similar chelate forming fibers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is (703) 308-3840. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

The fax phone numbers for this art unit are: (703) 872-9311 for "Official" faxes after Final Rejection; (703) 872-9310 for all other "Official" faxes; and (703) 872-9492 for "Draft" and other "Unofficial" faxes.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

Ivars Cintins
Ivars C. Cintins
Primary Examiner
Art Unit 1724

I. Cintins
September 14, 2002